

## UTILITY ELEMENT

This utility element summarizes the Camp Dresser & McKee Final Report of 1997, which is incorporated into the Fauquier County Comprehensive Plan. Public sewer and water lines owned and operated by the Fauquier County Water and Sanitation Authority (WSA) are shown on Figures 9-SF-1 and 9-SF-2. Sewer extensions, which extend to the north as far as Opal, terminate at a major sewer treatment plant to the south of the Town of Remington. This sewage treatment plant, a Shreiber system, is also owned and operated by the WSA. The treatment plant has an existing capacity of 1.4 million gallons per day. The addition of mechanical equipment – pumps and aeration devices – would allow a comparatively inexpensive expansion of this plant to 2 million gallons per day (Camp Dresser & McKee, Volume 1, page 2.4.) Future development within the three Service Districts, averaging the middle of given density ranges, could be handled by the 2 million gallon capacity.

Since the WSA has permission from the Commonwealth of Virginia State Water Control Board to expand the treatment plant by an additional 500,000 gallons per day, the three districts have a solid margin of safety.

Public water in Bealeton and part of Remington is derived from wells located in various subdivisions and school sites throughout Bealeton and Remington. These wells are connected into a loop system of pipes, while pressure is maintained by means of a 500,000-gallon storage tank and a 285,000-gallon standpipe. Presently three wells generate 405,000 gallons per day of water to take care of system users. Additional pumps at these wells could raise their yield by 136,000 gallons while the WSA has already dug and capped three additional wells with a capacity of 780,000 gallons per day. Thus WSA's Southern Fauquier water system has a current capacity in excess of 1.3 million gallons per day and is using about 25% of that capacity.

Members of the Citizen Service District Planning Committee voiced strong objection to the taste of Bealeton's water. This off-taste is probably due to very high sulfate levels of the water derived from the well at Grace Miller School (390 milligrams per liter). The Grace Miller School well water is also very 'hard' due to a very high concentration of Total Dissolved Solids (766 milligrams per liter). The engineers have advised the WSA that such trace elements do not represent a health issue (Camp Dresser & McKee, Volume 1, page 3.9). However Bealeton's wells exceed sodium limits (20 milligrams per liter) and are a challenge for those with strict dietetic requirements. The Citizen Committee has repeatedly expressed the wish that WSA acquire technology to better filter and improve water quality.

The Town of Remington provides water within the Town and in the Service District to the west of the railroad. Two of the Town's four wells produce over 420,000 gallons per day of palatable water, while a 2001-02 study, by Emery & Garrett Groundwater, confirms that this aquifer has abundant supply. The Town's two storage tanks have a capacity of nearly 403,000 gallons.

Concerning the public water supply in Opal, the WSA contracted a study of groundwater availability from Emery & Garrett Groundwater in 2000 and the study identified six areas for well drilling. The developers of Green Meadows recently dug two wells, and will give them to WSA when the system is operational. This is a start, and a recent County Task Force report committed the WSA and the County to develop a linked and viable community water system in the Opal District.